NAV03 - NONDESTRUCTIVE TESTING (ISO 4.9)

NOTE - ALL QUESTIONS ON THIS AUDITOR'S PROCESS GUIDE ARE CONSIDERED PRIORITY CODE "A" EXCEPT QUESTION #24 WHICH IS CODED "B"

1.	a. Identify types of nondestructive testing performed at the facility being audited:	
	___MT ___UT ___PT ___ET	
	___RT ___VT	
	___Other (specify):	
	b. Identify which test processes were witnessed and which were verified by objective quality evidence.	
2.	Are applicable NDT procedures available and approved (IF REQUIRED)? Identify procedure number, revision, date and applicable Approval Number (if required).	
	MT Procedure _____ Rev. ___ Date _____ # _____	
	PT Procedure _____ Rev. ___ Date _____ # _____	
	UT Procedure _____ Rev. ___ Date _____ # _____	
	VT Procedure _____ Rev. ___ Date _____ # _____	
	ET Procedure _____ Rev. ___ Date _____ # _____	
	RT Procedure _____ Rev. ___ Date _____ # _____	
Personnel Qualification:		
3.	Are all NDT personnel, including the examiner, recertified by examination at a minimum interval as required by specification?	___ Yes ___No
4.	Are adequate records available to administer personnel qualification; e.g. name, evidence of examination given, grade, re-certification dates, signature of examiner?	___Sat ___Unsat
5.	Do records include evidence of performance of applicable NDT during the last 6 months to maintain qualification?	___Sat ___Unsat
6.	a. Are vision test records available?	___Sat ___Unsat
	b. Do these records indicate a J1 Jaeger test or equivalent and brightness discrimination, on an annual basis?	___Sat ___Unsat
7.	Do vision test records note corrective aids (glasses) when applicable?	___Sat ___Unsat

NAV03 - NONDESTRUCTIVE TESTING (ISO 4.9)

NDT Witnessing: The following questions are to be answered as a result of observing NDT being performed and/or observation of the applicable work area:		
Magnetic Particle (MT): ___Sat ___Unsat ___N/A ___Witnessed ___Review of Records		
8.	a. Is the correct procedure readily available to the inspector?	___Yes ___No
	b. Is performance in accordance with the method/set-up of the procedure? (Unidirectional vice multidirectional)	___Yes ___No
9.	Is the inspector qualified?	___Yes ___No
10.	Is the amperage within the procedure range?	___Yes ___No ___N/A
11.	Is the lighting adequate per procedure?	___Yes ___No ___N/A
12.	Are correct accept/reject criteria being applied?	___Yes ___No ___N/A
13.	Do inspection records indicate heat off date when required? (For 24 hour or 7 day MT)?	___Yes ___No ___N/A
14.	Are records of MT performed adequate i.e. inspector and date, joint or piece inspected, equipment used, number and type of defects, repair description?	___Yes ___No ___ N/A
15.	Is equipment calibration current?	___Yes ___No ___N/A
16.	Is material being demagnetized after testing, as required by procedure?	___Yes ___No
Liquid Penetrant (PT): ___Sat ___Unsat ___N/A ___Witnessed ___Review of Records		
17.	a. Is the correct procedure available to the inspector?	___Yes ___No
	b. Is performance in accordance with the procedure?	___Yes ___No
18.	Is the inspector qualified?	___Yes ___No
19.	Is the lighting adequate per procedure?	___Yes ___No ___N/A
20.	Are correct accept/reject criteria being applied?	___Yes ___No

NAV03 - NONDESTRUCTIVE TESTING (ISO 4.9)

21.	Is the proper test method being utilized for the type of inspection being performed i.e. Group I for welds, other than Group I for fasteners?	___Yes ___No
22.	a. Are the penetrant materials used as listed in the approved procedure (cleaners, penetrants, solvent, developer)?	___Yes ___No
	b. Are penetrant materials traceable to the certifications?	___Yes ___No
23.	Are the correct precleaning, penetrant and inspection developer dwell times being used?	___Yes ___No
24.	Is proper post inspection cleaning of the part performed?	___Yes ___No ___N/A ___ Not Observed
25.	Are there adequate records of PT performed?	___Yes ___No
Radiography (RT): ___Sat ___Unsat ___N/A ___Witnessed ___Review of Records		
26.	a. Is the correct procedure readily available to the inspector?	___Yes ___No
	b. Is performance in accordance with the method/set-up of the procedure?	___Yes ___No
27.	a. Is a sketch, drawing, procedure or equivalent record available to show the set-up used to make each radiograph?	___Yes ___No
	b. Is the sketch, drawing or procedure legible?	___Yes ___No
28.	Is there a system for positive identification of RT film correlating to the part inspected?	___Yes ___No
29.	Are the RT location markers maintained on the part to permit coordination with their images on the film?	___Yes ___No ___N/A
30.	Is the film viewing facility constructed to exclude objectionable background lighting and contain a film viewed with a cooling device and densitometer?	___Yes ___No
31.	Are penetrameters correctly identified with lead numbers or engraved strips indicating material thickness?	___Yes ___No
32.	Are penetrameters permanently identified by material or principal alloy?	___Yes ___No

NAV03 - NONDESTRUCTIVE TESTING (ISO 4.9)

33.	Is the correct penetrameter being used?	___Yes ___No
34.	Are appropriate calculations of source half-life/exposure time being performed?	___Yes ___No
35.	Are radiographic film storage areas adequate?	___Yes ___No ___N/A
36.	Are radiographic film packages adequately maintained? (i.e. torn, wet damaged)	___Yes ___No ___N/A
37.	Are all artifacts identified and dispositioned on the reader sheet?	___Yes ___No ___N/A
38.	Do RT records contain the following:	___Yes ___No
	a. Correct penetrameter size used	___Sat ___Unsat ___N/A
	b. Correct penetrameter material used	___Sat ___Unsat ___N/A
	c. Proper shim material and thickness used	___Sat ___Unsat ___N/A
	d. Correct source-to-film distance used	___Sat ___Unsat ___N/A
	e. Film density on block image is not greater than 15% of the density in area of interest	___Sat ___Unsat ___N/A
	f. Film density (single film viewing) is 1.5 to 4.0 in area(s) to be examined	___Sat ___Unsat ___N/A
	g. Film density (double film viewing) is 1.5 to 4.0 in area(s) to be examined	___Sat ___Unsat ___N/A
	h. Radiograph(s) show complete coverage	___Sat ___Unsat ___N/A
	i. Complete coverage of repaired area(s)	___Sat ___Unsat ___N/A
	j. Original radiographs of repaired area(s) included with overread package if applicable)	___Sat ___Unsat ___N/A
	k. RSS provided with overread package	___Sat ___Unsat ___N/A
	l. Shooting sketch specifies wall thickness of item	___Sat ___Unsat ___N/A

	m. Sketch (es) showing location(s), size(s), shape(s) of repaired area(s) included with over read package	___Sat ___Unsat ___N/A
	n. Film processing defects and artifacts have been	___Sat ___Unsat ___N/A
	o. Radiographic Inspection Report has Contractor Approval when required by the purchase order/contract	___Sat ___Unsat ___N/A
Ultrasonic Inspection (UT): ___Sat ___Unsat ___N/A ___Witnessed ___Review of Records		
39.	a. Is the correct procedure readily available to the inspector?	___Yes ___No
	b. Are performance and methods/set-up in accordance with the procedure? (longitudinal vice transverse)	___Yes ___No
40.	Is the inspector qualified?	___Yes ___No
41.	Is a system in place to qualify equipment, including master transducers and calibration blocks?	___Yes ___No
42.	Is the surface finish of the piece being tested in accordance with the procedure?	___Yes ___No ___N/A
43.	Is the calibration block/s correctly identified by material type and uniquely identified (serialized)?	___Yes ___No ___N/A
44.	Is the couplant removed at the completion of testing?	___Yes ___No ___N/A ___ Not Observed
45.	a. Is calibration checked/rechecked at the beginning and completion of testing?	___Yes ___No ___N/A
	b. Is equipment calibration current?	___Yes ___No
46.	Are inspection records adequate?	___Yes ___No
Eddy Current Inspection (ET): ___Sat ___Unsat ___N/A ___Witnessed ___Review of Records		
47.	a. Is the correct procedure available to the inspector?	___Yes ___No

	b. Is performance in accordance with the procedure?	___Yes ___No ___N/A
48.	Is the inspector qualified?	___Yes ___No
49.	Is the surface finish/configuration of the part adequate to allow free movement of the probe?	___Yes ___No ___N/A
50.	Is the calibration standard utilized by material type and uniquely identified?	___Yes ___No
51.	Is the instrumentation used calibrated as required by procedure?	___Yes ___No
52.	Is the frequency setting correct for the probe used?	___Yes ___No
53.	Is the scanning technique and speed in accordance with the procedure?	___Yes ___No
54.	Are ET rejectable indications being dispositioned properly (i.e., ET rejects verified by MT)?	___Yes ___No
55.	Are inspection records adequate to meet procedural requirements?	___Yes ___No
Visual Inspection (VT): ___Sat ___UnSat ___N/A ___Witnessed ___Review of Records		
56.	a. Is the correct procedure readily available to the inspector?	___Yes ___No
	b. Is performance in accordance with the procedure?	___Yes ___No
	c. When applicable, is the correct magnification used?	___Yes ___No
57.	Is the inspector qualified?	___Yes ___No
58.	Are adequate gages and measuring devices available to perform inspection in accordance with the procedure?	___Yes ___No ___N/A
59.	Is lighting adequate?	___Yes ___No
60.	For VT of welds, do inspections and records adequately cover the cover the following:	
	* Weld size _____	___Yes ___No
	* Weld configuration _____	___Yes ___No

NAV03 - NONDESTRUCTIVE TESTING (ISO 4.9)

	* Surface uniformity _____	___Yes ___No
	* Surface cleanliness _____	___Yes ___No
	* Physical defects _____	___Yes ___No
	* Contour of welded and/or ground surface _____	___Yes ___No
61.	For VT of items other than welds, are records available?	___Yes ___No

Additional Comments/Concerns: